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Reply to Office Action of March 3, 2006

AMENDMENTS TO THE CLAIMS

1. (Currently amended) Reactive dyes as per the hereinbelow indicated and defined general formula (I),

where

 D^1 and D^2 are independently a group of the general formula (1)

$$R^{1}$$
 R^{1}
 R^{2}
 R^{3}

where

 R^1 and R^2 are independently hydrogen, (C₁-C₄)-alkyl, (C₁-C₄)-alkoxy, hydroxyl, sulfo, carboxyl, cyano, nitro, amido, ureido or halogen; and

X¹ is hydrogen or a group of the formula -SO₂-Z,

where

Z is -CH=CH₂, -CH₂CH₂Z¹ or hydroxyl,

where

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Z is hydroxyl or an alkali-detachable group; or

 D^1 and D^2 are independently a naphthyl group of the general formula (2)

$$R^3$$
 R^3
 R^2
 R^3
 R^3
 R^3
 R^3
 R^3
 R^3

where

R³ and R⁴ are independently hydrogen, (C₁-C₄)-alkyl, (C₁-C₄)-alkoxy, hydroxyl, sulfo, carboxyl, cyano, nitro, amido, ureido or halogen; and

 x^2 has one of the meanings of x^1 ; or

 D^1 and D^2 are independently a group of the general formula (3)

$$R^7 - N$$
 R^5
 R^5
 SO_3M

where

 R^{5} and R^{6} independently have one of the meanings of R^{1} and R^{2} ;

 R^7 is hydrogen, (C₁-C₄)-alkyl, unsubstituted or (C₁-C₄)-alkyl-, (C₁-C₄)-alkoxy-, sulfo-, halogen- or carboxyl-substituted phenyl; and

22 ____ is a heterocyclic reactive radical; or

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Z^2 a group of the general formula (4) or (5) or (6)

where

V is fluorine or chlorine;

U1, U2 are independently fluorine, chlorine or hydrogen; and

Q¹, O² are independently chlorine, fluorine, cyanamido, hydroxyl, (C₁-C₆)-alkoxy, phenoxy, sulfophenoxy, mercapto, (C₁-C₆)-alkylmercapto, pyridino, carboxypyridino, carbamoylpyridino or a group of the general formula (7) or (8)

$$-N_{W-SO_{2}Z}^{R^{8}}$$
 $-N_{R^{10}(8)}^{R^{9}}$

where

is hydrogen or (C₁-C₆)-alkyl, sulfo-(C₁-C₆)-alkyl or phenyl unsubstituted or substituted by (C₁-C₄)-alkyl, (C₁-C₄)-alkoxy, sulfo, halogen, carboxyl, acetamido, ureido:

R⁹ and R¹⁰ independently have one of the meanings of R⁸ or combine to form a cyclic ring system of the formula -(CH₂)_j-, where j is 4 or 5, or alternatively

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-(CH₂)₂-E-(CH₂)₂-, where E is oxygen, sulfur, sulfo, -NR ¹¹ where R ¹¹ = (C₁-C₆)-alkyl;

W is phenylene which is unsubstituted or substituted by 1 or 2 substituents, such as

(C₁-C₄)-alkyl, (C₁-C₄)-alkoxy, carboxyl, sulfo, chlorine, bromine, or is

(C₁-C₄)-alkylene-arylene or (C₂-C₆)-alkylene, which can be interrupted by oxygen,

sulfur, sulfo, amino, carbonyl, carboxamido, or is phenylene-CONH-phenylene, which is

unsubstituted or substituted by (C₁-C₄)-alkyl, (C₁-C₄)-alkoxy, hydroxyl, sulfo, carboxyl,

amido, ureido or halogen, or is naphthylene which is unsubstituted or substituted by 1 or

2 sulfo groups; and

Z is as defined above; or

 D^1 and D^2 are independently a group of the general formula (9)

where

R¹² is hydrogen, (C₁-C₄)-alkyl, aryl or a substituted aryl radical;

R¹³ and R¹⁴ are independently hydrogen, (C₁-C₄)-alkyl, (C₁-C₄)-alkoxy, hydroxyl, sulfo, carboxyl, cyano, nitro, amido, ureido or halogen; and

A is a phenylene group of the general formula (10)

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where

R¹⁵ and R¹⁶ are independently hydrogen, (C₁-C₄)-alkyl, (C₁-C₄)-alkoxy, hydroxyl, sulfo, carboxyl, cyano, nitro, amido, ureido or halogen; or a naphthylene group of the general formula (11)

where

R¹⁷ and R¹⁸ are independently hydrogen, (C₁-C₄)-alkyl, (C₁-C₄)-alkoxy, hydroxyl, sulfo, carboxyl, cyano, nitro, amido, ureido or halogen; or a polymethylene group of the general formula (12)

$$-(CR^{19}R^{20})_{k^-}$$
 (12)

where

is a whole number greater than 1 and R^{19} and R^{20} are independently hydrogen, (C₁-C₄)-alkyl, (C₁-C₄)-alkoxy, hydroxyl, cyano, amido, halogen or aryl; and X^3 has one of the meanings of X^1 ; and

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R, R* are independently hydrogen, (C1-C4)-alkyl or sulfomethyl; and

M is hydrogen, an alkali metal or one equivalent of an alkaline earth metal, with the proviso that the dyes of the general formulae (I) contain at least one fiber-reactive heterocyclic group of the general formula formula (4) or (6).

- 2. (Canceled)
- (Previously presented) Reactive dyes as per claim 1, where the substituents R are hydrogen or sulfomethyl and R* is hydrogen.
- 4. (Currently amended) Reactive dyes as per claim 1, characterized in that wherein the substituents R¹ and R² are hydrogen, methyl, methoxy or sulfo, R¹² to R¹⁶ are hydrogen and R³ to R⁶, R¹⁷ and R¹⁸ are hydrogen or sulfo, R⁷ and R⁸ are hydrogen methyl or phenyl and R⁹ and R¹⁰ are hydrogen, methyl 2-sulfoethyl, 2-, 3- or 4-sulfophenyl, or R⁹ and R¹⁰ combine to form a cyclic ring system which conforms to the formula -(CH₂)₂-O-(CH₂)₂-.
 - (Currently amended) Reactive dyes as per claim 1, characterized in that wherein Z is vinyl, β-chloroethyl or β-sulfatoethyl.
 - 6. (Currently amended) Reactive dyes as claimed in claim 2 claim 1, characterized in that wherein Q¹ and Q² in the general formula (5) are independently fluorine, chlorine, cyanamido, morpholino, 2-sulfophenylamino, 3-sulfophenylamino, 4-sulfophenylamino,

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3-(2-sulfatoethylsulfonyl)phenylamino, 4-(2-sulfatoethylsulfonyl)phenylamino, 3-(vinylsulfonyl)phenylamino, 4-(vinylsulfonyl)phenylamino, N-methyl-N-(2-(2-sulfatoethylsulfonyl)ethyl)amino or N-phenyl-N-(2-(2-sulfatoethylsulfonyl)ethyl)amino.

7. (Previously presented) A process for preparing dyes of the general formula (I) as per claim 1, which comprises diazotizing one equivalent of an amine of the general formula (16)

$$D^1 - NH_2$$
 (16),

where D¹ is as defined in claim 1 and the resulting diazonium compound being reacted in a first stage with an aqueous solution or suspension of one equivalent of a coupling component as per the general formula (17)

where R, R* and M are each as defined in claim 1, to form a monoazo dye as per the general formula (13)

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and subsequently one equivalent of an amine of the general formula (18) $D^{2} - NH_{2}$ (18),

where D² is as defined in claim 1, being diazotized and the resulting diazonium compound being coupled in the second stage with the monoazo dye of the general formula (13) obtained in the first stage to form the disazo dye of the general formula (I).

8. (Currently amended) The process for preparing dyes of the general formula (I) as per claim 1 in the event that the groups D¹ and D² as per the general formulae (I) have the same meaning by two equivalents of an amine of the general formula (16)

$$D^{1} - NH_{2}$$
 (16),

where D¹ is as defined in claim 1 which comprises diazotizing and reacting in a first stage with one equivalent of a coupling component of the general formula (17)

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to form a monoazo dye of the general formula (13)

and the second coupling to the disazo dye of the general formula (I) where the groups D^1 and D^2 have the same meaning being carried out subsequently.

- 9. (Previously presented) An aqueous liquid preparation containing a dye as set forth in claim 1 at a level of 5-90% by weight.
- 10. (Canceled)
- 11. (Currently amended) Reactive dyes as per claim 2 claim 1, where the substituents R are hydrogen or sulfomethyl and R* is hydrogen.
- 12. (Currently amended) Reactive dyes as per claim 11, characterized in that wherein the substituents R¹ and R² are hydrogen, methyl, methoxy or sulfo, R¹² to R¹⁶ are hydrogen

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and R^3 to R^6 , R^{17} and R^{18} are hydrogen or sulfo, R^7 and R^8 are hydrogen methyl or phenyl and R^9 and R^{10} are hydrogen, methyl 2-sulfoethyl, 2-, 3- or 4-sulfophenyl, or R^9 and R^{10} combine to form a cyclic ring system which conforms to the formula –(CH₂)₂-O-(CH₂)₂-.

- 13. (Currently amended) Reactive dyes as per claim 12, characterized in that wherein Z is vinyl, \(\beta\)-chloroethyl or \(\beta\)-sulfatoethyl.
- 14. (Currently amended) Reactive dyes as claimed in claim 13, characterized in that wherein Q¹ and Q² in the general formula (5) are independently fluorine, chlorine, cyanamido, morpholino, 2-sulfophenylamino, 3-sulfophenylamino, 4-sulfophenylamino, 3-(2-sulfatoethylsulfonyl)phenylamino, 4-(2-sulfatoethylsulfonyl)phenylamino, 3-(vinylsulfonyl)phenylamino, 4-(vinylsulfonyl)phenylamino, N-methyl-N-(2-(2-sulfatoethylsulfonyl)ethyl)amino or N-phenyl-N-(2-(2-sulfatoethylsulfonyl)ethyl)amino.
 - 15. (Previously presented) A process of dyeing or printing hydroxyl- and/or carboxamidocontaining fiber material which comprises contacting the reactive dyes as per claim 1 with said material.